CLAIMS

What is claimed is:

1.   An interface system for monitoring a number of channels in a communications system having at least one group of a number of nodes, each node having a number of channels, the interface system comprising:

a processor electrically coupled to a local interface;

a memory electrically coupled to the local interface;

a display device electrically coupled to the local interface; and

test result interface logic stored on the memory and executable by the processor, the test result interface logic including:

group level display logic to generate a number of group level test result components on the display device that include a number of group parameters associated with the at least one group;

node level display logic to generate a number of node level test result components on the display device that include a number of node parameters associated with one of the nodes; and

channel level display logic to generate a number of channel level test result components on the display device that include a number of channel parameters associated with one of the nodes.

2.   The system of claim 1, wherein the group level test result components further comprise a node information table listing a number of the nodes associated with the at least one group.

3.   The system of claim 1, wherein the group level test result components further comprise a group total node power graph indicating a power range for a number of the nodes associated with the at least one group.

1   4.   The system of claim 1, wherein the group level test result components

2   further comprise an average percent availability graph indicating a low percent

3   availability, a high percent availability, and an average percent availability for a number

4   of the nodes associated with the at least one group.

1   5.   The system of claim 1, wherein the node level test result components

2   further comprise a channel plan graph that indicates a desired frequency spectrum of a

3   respective one of the nodes, the desired frequency spectrum including at least one

4   frequency band associated with at least one of the channels that are associated with the

5   respective node.

1   6.   The system of claim 1, wherein the node level test result components

2   further comprise a total node power graph indicating an amount of power associated

3   with one of the nodes with respect to time.

1   7.   The system of claim 1, wherein the node level test result components

2   further comprise a node spectrum scan indicating an actual frequency spectrum of one

3   of the nodes with respect to time.

1   8.   The system of claim 1, wherein the channel level test result components

2   further comprise a channel carrier-to-noise graph indicating a magnitude of a channel

3   carrier-to-noise ratio of the channels associated with one of the nodes with respect to

4   time.

1   9.   The system of claim 1, wherein the channel level test result components

2   further comprise channel percent available graph indicating a percent availability of the

3   channels associated with one of the nodes with respect to time.

1   10.   The system of claim 1, wherein the channel level test result components

2   further comprise a channel average noise power graph indicating a magnitude of a

3   channel noise power of the channels associated with one of the nodes with respect to

4   time.

1   11.   The system of claim 1, wherein the channel level test result components

2   further comprise a channel power graph indicating a magnitude of a channel noise

3   power of one of the channels associated with one of the nodes with respect to time.

1   12.   The system of claim 1, wherein the channel level test result components

2   further comprise a channel burst counter graph indicating a number of channel bursts

3   occurring in the channels associated with one of the nodes with respect to a burst

4   duration length.

1   13.   An interface method for monitoring a number of channels in a

2   communications system having at least one group of a number of nodes, each node

3   having a number of channels, the interface method comprising the steps of:

4   generating a number of group level test result components on a display

5   device that include a number of group parameters associated with the at least one

6   group;

7   generating a number of node level test result components on the display

8   device that include a number of node parameters associated with one of the nodes; and

9   generating a number of channel level test result components on the

10   display device that include a number of channel parameters associated with one of the

11   nodes.

14. The method of claim 13, wherein the step of generating a number of node level test result components on the display device that include a number of node parameters associated with one of the nodes further comprises the step of generating a channel plan graph that indicates a desired frequency spectrum of a respective one of the nodes, the desired frequency spectrum including at least one frequency band associated with at least one of the channels that are associated with the respective node.

15. The method of claim 13, wherein the step of generating a number of node level test result components on the display device that include a number of node parameters associated with one of the nodes further comprises the step of generating a total node power graph indicating an amount of power associated with one of the nodes with respect to time.

16. The method of claim 13, wherein the step of generating a number of channel level test result components on the display device that include a number of channel parameters associated with one of the nodes further comprises the step of generating a channel carrier-to-noise graph indicating a magnitude of a channel carrier-to-noise ratio of the channels associated with one of the nodes with respect to time.

17. The method of claim 13, wherein the step of generating a number of channel level test result components on the display device that include a number of channel parameters associated with one of the nodes further comprises the step of generating a channel percent available graph indicating a percent availability of the channels associated with one of the nodes with respect to time.

18. The method of claim 13, wherein the step of generating a number of channel level test result components on the display device that include a number of channel parameters associated with one of the nodes further comprises the step of generating a channel average noise power graph indicating a magnitude of a channel noise power of the channels associated with one of the nodes with respect to time.

1   19.   The method of claim 13, wherein the step of generating a number of

2   channel level test result components on the display device that include a number of

3   channel parameters associated with one of the nodes further comprises the step of

4   generating a channel power graph indicating a magnitude of a channel noise power of

5   one of the channels associated with one of the nodes with respect to time.

1   20.   The method of claim 13, wherein the step of generating a number of

2   channel level test result components on the display device that include a number of

3   channel parameters associated with one of the nodes further comprises the step of

4   generating a channel burst counter graph indicating a number of channel bursts

5   occurring in the channels associated with one of the nodes with respect to a burst

6   duration length.